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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,643	02/19/2002	Kouichi Akagi	219653US3	2596

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EXAMINER

RODRIGUEZ, WILLIAM H

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 06/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/076,643

Applicant(s)

AKAGI ET AL.

Examiner

William H. Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 4 is/are allowed.
- 6) ☒ Claim(s) 2,3 and 5-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

✓ 1. **Figures 11 and 12** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

✓ 2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "*a structure having cylinders concentrically superimposed in multiple layers (claim 5)*" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

✓ 3. Claim 2 recites the limitation "the front end" in line 3. There is insufficient antecedent basis for this limitation in the claim. Also, it is not clear whether "the front end" being claimed is part of "the fuel oil supply" or "the cylinder unit". Appropriate correction and clarification is required.

✓ 4. Claim 3 recites the limitation "the distributing section" in line 2. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

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- ✓ 5. Claims 3 and 7-9 recite the limitation "the cylindrical space" in line 3. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.
- ✓ 6. Claims 3 and 7-9 recite the limitation "the end surface" in line 5. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.
- ✓ 7. Claim 3 recites the limitation "the fuel gas supply path" in line 3 of page 24. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.
- ✓ 8. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 2, 5, 6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- ✓ 11. Claim 2 recites the limitation "*a structure*" in line 5 while claim 3 recites the limitation "*a cylindrical structure*" in line 2. It is not clear from the specification what elements comprise or form the so called "the structure and the cylindrical structure". Further, it is not clear either from the claims or the specification if the element(s) called "the structure and the cylindrical structure" are the same element (one) with different names or if these are two different elements.

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If this a same element called by two different names, consistency is required. Appropriate correction and clarification are required.

- ✓ 12. Claim 5 recites the limitation "*a structure*" in line 5. It is not clear from the specification what elements comprise or form the so called "the structure". Appropriate correction is required.
- ✓ 13. Claim 5 recites the limitation "*a structure*" in line 5 while claim 6 recites the limitation "*a structure*" in line 5. It is not clear from the specification what elements comprise or form the so called "the structure". Further, it is not clear either from the claims or the specification if the element(s) called "structure and structure" are the same element (one) being claimed twice by mistake, or if these are two different elements with the same name. Appropriate correction and clarification are required.
- ✓ 14. Claim 6 recites the limitation "*a structure*" in line 5 while claim 8 recites the limitation "*a cylindrical structure*" in line 2. It is not clear from the specification what elements comprise or form the so called "the structure and the cylindrical structure". Further, it is not clear either from the claims or the specification if the element(s) called "structure and cylindrical structure" are the same element (one) with different names or if these are two different elements. If this a same element called by two different names, consistency is required. Appropriate correction and clarification are required.
- ✓ 15. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Allowable Subject Matter

16. Claims 1 and 4 are allowed.

17. Claims 2-3 and 5-9 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

18. The following is an examiner's statement of reasons for allowance: the prior art neither discloses nor makes obvious the combination set forth in the independent claims, and especially does not show "a fuel oil supply pipe passed through a cylinder unit provided in an axial direction of the pilot nozzle; a heat-shielding air layer formed between the fuel oil supply pipe and the cylinder unit; and a plurality of atomized-fluid supply paths and fuel gas supply paths provided in a circumferential direction of the cylinder unit.", in combination with the other claim limitations.

19. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodriguez whose telephone number is 703-605-1140. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy S. Thorpe can be reached on 703-308-0102. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.

W.R

W.R
June 16, 2003


CHARLES S. TREAY
PRIMARY EXAMINER